

REMARKS/ARGUMENTS

Claims 1-20 are pending in the application and are rejected as obvious based on U.S. Pat. Nos. 5,071,607 (Ayers) and 6,186,762 (Matthes).

Each of claims 1-20 requires a turret including upper and lower carousels (or turret portions). Each of these claims also requires that the upper and lower carousels (or turret portions) include openings in which punch casings are removably received. Each of these claims further requires punches (or punch members) slidably received by one of the punch casings within an opening defined in the punch casing.

Each of claims 1-20, following entry of the amendments herein, further requires that *each punch* (or punch member) **include a mold recess** at a terminal end thereof. (See Figure 8 of the drawings and the specification at page 9, line 25 *et seq.*)

Ayers discloses a tablet press including upper and lower ram assemblies (30, 10; Figs. 1-3) having upper and lower die elements (32, 12). The ram assemblies are driven by structure (not shown) for vertical movement with respect to a die plate (43). The die plate includes orifices (44) in which hollow body portions (33, 13) of the die elements (32, 12) are driven to compress a material between end faces (31, 11) of the die elements and the walls of the orifice. (col. 3, lines 60-64)

Ayers further discloses that the upper and lower ram assemblies (30, 10) include piercing members (39, 14) slidably mounted within the respective die elements (32, 12). Springs (42, 22) bias the piercing members (39, 14) such that punch portions (40, 19) are normally contained within the respective die elements (32, 12). The compression of the material results in the punch portions (40, 19) being driven outwardly from the die elements to form holes in a molded tablet (Fig. 2 and col. 4, lines 12-42)

The Examiner asserts that the piercing members (39, 14) of Ayers provide comparable structure to the sliding punches required by each of claims 1-20. The Examiner asserts that the hollow body portion (13) of lower die element (12) of Ayers is comparable to the required lower casings. Regarding the required upper casings, the Examiner asserts that element (38) of Ayers is comparable. Element (38), however, is identified in Ayers as an "annular

flange” of the hollow body portion (33) of upper die element (32). For the purposes of responding, it will be presumed that reference to the hollow body portion (33) of upper die element (32) was intended instead of the annular flange (38).

The Examiner acknowledges that Ayers fails to disclose a turret having carousels (or turret portions) for supporting a plurality of punch casings as required. The Examiner, however, relies on Matthes, which discloses a tablet press (Fig. 5) including upper and lower punches (56, 57) slidably driven with respect to carousel portions of a rotor (30) by rollers (40, 50). The reciprocating punches form tablets within die orifices (not shown) of a die plate (55). (col. 4, lines 60-67) Matthes also discloses that the tablet press includes upper and lower rollers (40, 50) that engage the upper and lower punches (56, 57).

The Examiner asserts that end faces (31, 11) of the hollow body portions (33, 13) provide mold recesses. ***The hollow body portions*** (33, 13), however, ***are the casings*** according to the Examiner. The position taken by the Examiner is, therefore, erroneous. Ayers does not disclose that recesses be included in the terminal ends of the purported punches (*i.e.*, the piercing members (39, 14)). Furthermore, it would not have been obvious to modify Ayers to include mold recesses in the piercing members. Ayers teaches away by teaching instead that the piercing members (39, 14) punch holes in tablets that are molded by compression of a tablet material between the end faces of the hollow body portions (33, 13).

Also, one skilled in the art considering the teachings of Matthes would not have been motivated to modify the piercing members of Ayers in the claimed manner to include mold recesses.

The necessary teaching of the claimed combination, which requires punch casings received within turret openings and punches ***having terminal end mold recesses*** slidably received by the casings, is not provided by Ayers and Matthes. The missing teaching of the claimed invention, therefore, can only be supplied by improper hindsight use of the applicant's disclosure.

For at least the foregoing reasons, the invention claimed in each of claims 1-20 is not obvious based on Ayers and Matthes.

Claim 2 requires upper and lower rollers engaging the punches to drive them towards each other. As acknowledged by the Examiner, Ayers fails to disclose rollers engaging the sliding punches (*i.e.*, the piercing members (39, 14)). The Examiner, however, asserts that modification of Ayers in the claimed manner would have been obvious based on Matthes. The position taken by the Examiner is erroneous. The piercing members (39, 14) of the Ayers press are housed within the hollow body portions (33, 13) of the die elements (32, 12). The teaching of Ayers, therefore, teaches away from modification in the claimed manner to include rollers engaging the piercing members contained within the die elements. One skilled in the art considering the teachings of Ayers and Matthes would not have been motivated to modify Ayers to include rollers engaging the piercing members (39, 14) as required. It is also not apparent how the rollers could even possibly attach to the “punches” as defined by the Examiner. The “casing” interferes with any direct connection. Thus, the Examiner’s combination simply would not work.

Furthermore, the necessary teaching of the invention of claim 2, which requires **rollers engaging** the punches (*i.e.*, **the piercing members**), lacking in Ayers and Matthes, can only be supplied by improper hindsight use of the applicant’s disclosure.

For at least this reason in addition to the above reasons applicable to each of claims 1-20, the invention of claim 2 is not obvious based on Ayers and Matthes.

Claim 4 requires, among other things, that the lower casings include a die portion at an end having an opening defining **a material chamber** and that the lower punches include **a mold shaft** extending from a body portion and slidably received in the material chamber. Claim 4 further requires that reciprocation of the lower punches **retract the end of the mold shaft from an end of the material chamber**, thereby providing for receipt of a tablet material in the chamber. This feature provides for tablet molding by the press without the need for a separate die plate. (see Figures 7A-7E)

The Examiner asserts that the punch portion (19) of piercing member (14) and the hollow body portion (13) of lower die element (12) provide structure comparable to the required mold shaft and material chamber. Figures 1 and 2 of Ayer show retracted and extended positions for the piercing member (14) with respect to opening in the end of the hollow body portion (13) in which the piercing member is housed. As shown, the *Ayers* press **is not adapted to retract** an

end of the punching portion (19) of piercing member (14) *from an end portion of the die element (12)* to provide for receipt of tablet material in the die portion opening as claimed. Instead, Ayers teaches away by teaching inclusion of a die plate (43) including orifices (44) which receive tablet material and have walls which, in cooperation with end faces (31, 11) of the die portions (33, 13) "form the mold which defines the configuration of the end product." (col. 3, lines 60-64) It would be contrary to the teachings of Ayers to facilitate receipt of tablet material within the interior of the hollow body portion (13) in which the piercing member (19) is housed.

One skilled in the art considering the teachings of Ayers and Matthes would not have been motivated to modify Ayers to provide for retraction of the punching end of the piercing member (14) from the end of the hollow body portion (13) as required. The necessary teaching of the invention of claim 4, lacking in Ayers and Matthes, can only be supplied by improper hindsight use of the applicant's disclosure.

For at least this reason in addition to the above reasons applicable to each of claims 1-20, the invention of claim 4 is not obvious based on Ayers and Matthes.

Claim 5 requires that the openings in the upper and lower carousels of the turret that receive the casings be arranged in at least two concentric rows of openings. The required arrangement is not shown or suggested in either Ayers or Matthes. The necessary teaching of the invention of claim 5, lacking in Ayers and Matthes, can only be supplied by improper hindsight use of the applicant's disclosure.

For at least this reason in addition to the above reasons applicable to each of claims 1-20, the invention of claim 5 is not obvious based on Ayers and Matthes.

Claim 10 requires that the upper punches include a body portion extending above an upper portion of the casing and a *retention flange at an upper end of the body portion*. Claim 10 further requires a resilient member contacting the retention flange and an upper surface of the casing.

The Examiner asserts that the upper portion of the piercing member (39) is comparable to the required body portion of the upper punch and that element (35) is comparable to the required retention flange. The Examiner further asserts that spring (42) of Ayers is

comparable to the required resilient biasing member. The position taken by the Examiner is erroneous. Element (35) is described as a "pin" extending through a ram (36) of the upper ram assembly (30) and opposed slots (37) in die element (32). (col. 3, lines 47-48) The spring (42) is positioned within the interior of the die element (32) around the piercing member punching portion (40) within the die element (32). The arrangement locates the spring below the body portion (*i.e.*, below the upper portion of the piercing member (39)) and below the upper end of the casing (*i.e.*, below the upper end of the die element (32)).

One skilled in the art considering the teachings of Ayers and Matthes would not have been motivated to modify Ayers to relocate the spring at the upper end of the piercing member for contact with a piercing member retention flange and the die element upper surface as required. The necessary teaching of the invention of claim 10, lacking in Ayers and Matthes, can only be supplied by improper hindsight use of the applicant's disclosure.

For at least this reason in addition to the above reasons applicable to each of claims 1-20, the invention of claim 10 is not obvious based on Ayers and Matthes.

Claims 13 and 14 respectively require a lower plate having at least one ejection cam engaging the lower punches and a tablet weighting station adjacent the lower plate and defining an upper surface contacted by the lower punches. The required ejection cam and tablet weighting station are not shown or suggested in either Ayers or Matthes. The necessary teaching of the inventions of claim 13 and 14, lacking in Ayers and Matthes, can only be supplied by improper hindsight use of the applicant's disclosure.

For at least this reason in addition to the above reasons applicable to each of claims 1-20, the invention of claims 13 and 14 are not obvious based on Ayers and Matthes.

Claim 16 requires that the upper and lower punches respectively include upper and lower ends that are rounded. The required rounded upper and lower ends are not shown or suggested in either Ayers or Matthes. The necessary teaching of the invention of claim 16, lacking in Ayers and Matthes, can only be supplied by improper hindsight use of the applicant's disclosure.

For at least this reason in addition to the above reasons applicable to each of claims 1-20, the invention of claim 16 is not obvious based on Ayers and Matthes.

The applicant requests that the obviousness rejection of claims 1-20 be withdrawn. It is respectfully submitted that the present application is in condition for allowance. If the Examiner believes that direct communication would advance the prosecution, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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